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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,618	03/24/2004	Xingwu Wang	XW-672	8192
23575	7590	08/29/2006	EXAMINER	
CURATOLO SIDOTI CO., LPA 24500 CENTER RIDGE ROAD, SUITE 280 CLEVELAND, OH 44145			KOSLOW, CAROL M	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/808,618

Applicant(s)

WANG ET AL.

Examiner

C. Melissa Koslow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 15-41 and 99-155 is/are pending in the application.
- 4a) Of the above claim(s) 20-25, 31, 106-120, 125 and 129-151 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 15-19, 26-30, 32-41, 99-105, 121-124, 126-128 and 152-155 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/7/04, 7/7/04, 7/7/04
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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Applicant's election of the nitrogen species and the compositional species of nanoparticles disposed within a polymeric carrier in the reply filed on 10 July 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 20-25, 31, 106-120, 125 and 129-151 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse.

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

This application has an effective filing date of 24 March 2004 since none of the parent applications teach the elected species.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The disclosure is objected to because of the following informalities: The status of the patented and abandoned applications cited in the specification needs to be updated. Appropriate correction is required.

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The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The size range in claim 34 is not taught in the specification. Page 43, lines 8-13 teaches size ranges of less than about 100 nm, less than about 20 nm, less than about 15 nm, less than 11 nm and less than about 3nm. These ranges do not provide proper antecedent basis for the claimed range.

Claim 8 is objected to because of the following informalities: The Markush group lists “magnesium” twice. Appropriate correction is required.

Claims 1-12, 14-19, 26-30, 32-41, 99-105, 121-124, 126-128 and 152-155 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no disclosure in the specification of magnetic nanoparticles dispersed in a polymeric carrier. The specification teaches the particles in a polymeric binder in the amounts of claims 17-19 refer the amount of particles in a binder (pg. 28-30), but the specification and claims consider as the particles in a binder distinct from the particles dispersed in a polymeric carrier. The only place the specification teaches polymeric carriers is with respect to therapeutic agents and there are no nanoparticles in the discussed compositions. The amounts of claims 29 and 30 refer to the percentage of nanoparticles in a collection of particles (pg. 43) There is no disclosure in the specification of nanoparticles of iron, nitrogen and a third distinct atom. The specification only teaches iron nitrides, which only contain distinct atoms. There is no disclosure

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in the specification of nanoparticles of iron, nitrogen and aluminum. The specification teaches iron nitrides or aluminum nitrides. Pages 32 and 49-52 teach the composition comprising the nanoparticles has the properties of claims 99-105 and 152-155, not that the nanoparticles have these particles as claimed.

If applicants argue that the specification does teach the claimed elected composition, they must point out where in the specification it is taught.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 9-11, 15, 17-19, 28-30, 32-41, 121 and 124 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent application publication 2005/0039848 in view of JP 6-199525.

U.S. patent application publication 2005/0039848 teaches a polymeric composition, such as poly(ethylene-vinyl acetate), containing 20 or 50 wt% of magnetic particles having a size of 1-40 nm. The reference teaches the magnetic particles can be composed of any known ferromagnetic material. JP 6-199525 teaches rare earth-iron-nitrogen nanosized magnetic particles. The taught particles have a size of 10 nm or less. One of ordinary skill in the art would have found it obvious to use the nanoparticles of JP 06-199525 as the magnetic nanoparticles in U.S. patent application publication 2005/0039848. The taught rare earth-iron-nitrogen nanosized magnetic particles are identical to those claims and thus must have a squareness, saturation

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magnetization, phase transition temperature and average coherence length that falls within the claimed ranges, absent any showing to the contrary.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk
August 25, 2006


C. Melissa Koslow
Primary Examiner
Tech. Center 1700